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Nurturing Young: Fifty Years of Integrated Child Development Services (ICDS) in India

Jos Chathukulam

Manasi Joseph[*#]

Abstract

India has been grappling with a nutrition crisis for decades, and the governments over the years have introduced various public policy responses and schemes to address it. The Integrated Child Development Services (ICDS), introduced in 1975, is one among them. The ICDS is India's foremost nutritional and child development scheme, employing a multipronged approach to children's holistic development and well-being by integrating health, education and nutritional interventions through a vast network of Anganwadi centres across the country. This paper critically examines the strengths, challenges, weaknesses, and opportunities of ICDS over the last fifty years. It also offers insights into strategies aimed at fortifying its future direction, through the lens of 2020 National Education Policy (NEP) 2020 and early childhood care and education (ECCE). To enhance its rankings in global indices and to eradicate all forms of malnutrition, India must prioritize the strengthening of the ICDS-Anganwadi framework. Furthermore, the long-term success of India's national development agenda (Viksit Bharat 2047), as well as its commitment to achieving the Sustainable Development Goals by 2030, is inextricably linked to the health, nutrition, and well-being of its present and future generations. In this context, a robust and reimagined ICDS-Anganwadi paradigm emerges as a cornerstone for inclusive and sustainable development.

Keywords: ICDS, Anganwadis, Early Childhood Care and Education (ECCE), Nutrition, Food Security, National Education Policy, Doughnut Economics

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[*] Jos Chathukulam is the Director of and Manasi Joseph is a researcher and content writer with the Centre for Rural Management (CRM), Kottayam, Kerala.

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Introduction

During the British rule in India, a series of famines, including the Great Bengal Famine of 1770, the Great Famine of 1876 -78, the Deccan Famine of 1896-97, and the Bengal Famine of 1943, devastated the region. The Great Bengal Famine of 1770 resulted in the deaths of 10 million people (Sen 1981, Drèze and Sen, 1989, Sen, 1989, Sen 1990, Mallik, 2023). The Bengal Famine of 1943 resulted in the death of around three million people. The famines resulted in a high mortality rate among women due to famine-related diseases, abandonment, and poverty, which forced them to engage in survival tactics that adversely impacted their health (Mukherjee, 2017). The princely state of Travancore similarly experienced starvation and mass disease outbreaks during the Second World War, resulting in around 90,000 fatalities (Balasubramanian, 2023). Nevertheless, this incident did not garner significant attention, particularly when juxtaposed with the concurrent crisis in Bengal. The famines also exposed the vulnerability of the population, exacerbated by inadequate public health systems and nutritional deficiencies, particularly those of women and children (Mukherjee, 2017).

Independent India also had to deal with food crisis and malnutrition, affecting a considerable portion of its population, particularly women and children, who were the worst affected owing to severe nutritional deficiencies. While not amounting to distinct and unequivocal famines similar to those witnessed during the colonial rule, there were instances of food scarcity, nutrition crises and related difficulties during 1965, 1967, 1973, and 1979.

Since India was in a precarious condition in terms of food security, the governments in Independent India introduced a slew of public policy responses to address the nutrition crisis. Shastri, the second Prime Minister of India, significantly contributed to self- reliance in food production in the country through the Green Revolution (sought to enhance food grain production through the use of high-yielding variety seeds and fertilizers). Shastri coined the slogan *Jai Jawan, Jai Kisan* (Hail to the Soldier, Hail to the Farmer), which acknowledged the contributions of farmers not only in ensuring food security but also national security.

The first section of the paper looks into the evolution of public policy responses to address malnutrition and to ensure food security, with special emphasis on ICDS. The second section offers a comparative analysis of ICDS-Anganwadi and global early childhood nutrition frameworks. The third section discusses the role of ICDS-Anganwadi in addressing cultural poverty[1] in India. The fourth section looks at ICDS - Anganwadi through the lens of the Doughnut Economics framework. The fifth section critically examines the impact made by ICDS-Anganwadi in addressing the nutrition crisis, as well as its important role in fostering early childhood care and education (ECCE), as envisioned by the National Education Policy (NEP), 2020. The sixth section looks into the challenges faced by ICDS in India. It is followed by a Conclusion and Way Forward.

A note on methodology

This is an empirically driven research paper and draws largely from field studies and research done by the first author on Anganwadis across India from the 1990s to 2024. The author has visited more than 1000 Anganwadi centres across India as part of national-level research studies and projects. The author has also visited several Anganwadis as part of state-specific projects connected with evaluation and monitoring research in multiple states[2] between January 2016 and December 2024.

During these visits to Anganwadis, the author got a first-hand experience of their day-to-day activities, operational mechanism, and infrastructural facilities, and interacted with workers, helpers, children, and their parents. Challenges and deficits vary from one Anganwadi centre to another, and all these field observations and inferences have been noted in the author's field diary. The author could also conduct site visits to selected delivery points of the Integrated Nutrition Programme (INP) units in South Africa, as well as the Nutrition Intervention and Cash Transfer Centers in Rwanda. The inputs from the field diary have helped the author to develop this article.

The author focused more on collection and analysis of non-numerical data from Anganwadis to elucidate perceptions, experiences, and behaviours by combining the elements of observation and ethnographic research. Desk research inputs have also been incorporated in this paper. The paper does not follow systematic research methodology approaches, and does not involve quantitative methods, including structured questionnaires and surveys.

Part I - Public Policy Responses for Food and Nutritional Security in Independent India, with Special Emphasis on ICDS

This section looks into the selected public policy responses of the Indian Government to ensure food and nutritional security in the country. India's first Five-Year Plan (1951-56) acknowledged that nutrition plays a crucial role in maintaining the health of the population and influences an individual's productivity. The First Plan highlighted the prevalent issue of under-nutrition across the nation, and the absence of adequate foods to complement staple cereals, which contributed to malnutrition.

The Second Five-Year Plan (1956-61) introduced certain schemes to provide nutrition at the optimal level to the entire population, particularly nutritional improvement of vulnerable groups, including expectant and nursing mothers, infants, and children. The Third Five-Year Plan (1961-66) also expressed similar views, but the Plan itself was unable to be followed due to Chinese aggression (1962), Indo-Pak War (1965), and severe drought in 1965-66. Defence and development remained the top-most priorities.

Failure of the Third Plan, along with devaluation of the rupee and inflationary recession, led to the postponement of the Fourth Five-Year Plan. Three Annual Plans/Plan Holiday (1966-69) were introduced in the interim. During this period, the Green Revolution was initiated, focusing on

boosting agricultural production through high-yielding varieties of seeds, increased fertilizer use, and improved irrigation facilities.

The White Revolution (Operation Flood) was launched during the Fourth Five-Year Plan (1969-74). During the Fifth Five-Year Plan (1974-79), the Minimum Needs Program (MNP) was introduced. Removal of Poverty (*Garibi Hatao*) and attainment of self-reliance were the two main objectives of the Fifth Plan. The MNP contained two types of activities: basic human resources development (elementary and adult education, health, drinking water supply, nutrition and rural housing), and basic infrastructure development (rural roads and electrification).

The MNP continued to be part of several following Plans, with new endeavours like cooking fuel, sanitation, development of slums, and other development-oriented programs added. The Sixth Five-Year Plan (1980-85) considered nutritional empowerment a function of the knowledge and income of the household and viewed employment and income as essential prerequisites for the improvement of the nutritional status of the family members. Thus, it emphasized minimal income / poverty alleviation as a strategy to address the nutrition crisis.

Meanwhile, on October 2, 1975, the Government of India introduced the ICDS to improve the nutritional and health status of children in the age group 0-6 years, with multiple objectives: to lay the foundation for proper psychological, physical and social development of the child; to reduce the incidence of mortality, morbidity, malnutrition and school dropouts; to achieve effective coordination of policy and implementation amongst various departments to promote child development; and to enhance the capability of mother to look after the normal health and nutritional needs of the child through proper nutrition and health education (Women and Child Development-MoWCD, 2025). In short, the ICDS aims to improve the nutritional and health status of children aged 0-6 years, along with maternal care, and to supplement the nutritional needs of expectant and lactating mothers.

The ICDS was discontinued in 1978 by the Morarji Desai government. However, during the Tenth Five-Year Plan, it was relaunched. The ICDS is a centrally-sponsored program[3], and it is implemented through a network of Anganwadi centres (Panda, 2024). The implementation, monitoring, and management of Anganwadis is the responsibility of the States and Union Territories.

The Tenth Five-Year Plan linked ICDS to Anganwadi Centres (AWCs) established mainly in rural areas (though also present in urban areas) and staffed with frontline workers.[4] In 2015, the Union government introduced five-tier monitoring committees at the National, State, District, Block and Anganwadi level, to strengthen the Anganwadis and to prevent corrupt practices.

As per government data, a total of 13,99,661 AWCs have been sanctioned across the country, out of which 13,63,000 are operational (Debroy and Sinha, 2023; NITI Aayog, 2024). There are thus approximately 14 Lakh AWCs in India. (PRS Legislative Research, February 28, 2025 as reported by the Government in Parliament). They are staffed by a total of 12,93,448 Anganwadi workers and 11,64,178 Anganwadi helpers across the country (MoWCD, 2023).

The ICDS has more than 100 million (10 crore) beneficiaries, making it one of the largest service delivery programs for improving nutritional standards and fostering holistic childhood development. This October 2025 marks fifty years of ICDS in India.

The ICDS provides for Anganwadis which deliver six services, including:

- Immunization
- Supplementary Nutrition
- Health Check-Up
- Referral Services
- Pre-school Education (non-formal)
- Nutrition and Health Information

For nutritional purposes, the ICDS provides 500 kilocalories (kCal) (with 12-15 grams of protein) every day to every child below six years of age. For adolescent girls, it is up to 600 kCal, with 18-20 grams of protein every day. The supplementary food provided in Anganwadis undergoes testing in four quality control laboratories of the Food and Nutrition Board, located in Delhi, Mumbai, Kolkata, and Chennai. Services related to immunization, health checkups, and referral services are delivered through the public health infrastructure under the Ministry of Health and Family Welfare (MoHFW).

As part of the Twelfth Five-Year Plan (2011-17), new strategies and initiatives were launched to revamp the ICDS. Convergence with ICDS and Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was one such strategy. Construction of AWC buildings in convergence with the MGNREGS, or in other words, the resources (labour generated by MGNREGS workers) and finances (material component for construction) from the MGNREGS are utilized to construct Anganwadi buildings in this framework. The cost of construction is shared between the MGNREGS, ICDS, and funds from local governments. The MoWCD, in convergence with the Ministry of Rural Development and Panchayati Raj Institutions had formulated an action plan to construct 4 lakh AWC buildings with child-friendly toilets up to 2019 under the MGNREGS. As per the government data, in 2017, around 70 per cent of Anganwadis in the country had drinking water facilities, and 63 per cent have toilet facilities (MoWCD, 2017).

In 2018, POSHAN Abhiyaan (National Nutrition Mission) was launched to improve the nutritional status of children, adolescent girls, pregnant women, and lactating women. To further address the persistent challenges, POSHAN 2.0 (*Mission Saksham Anganwadi and Poshan 2.0*) was introduced. The scheme was approved by the Government of India for implementation during the 15th Finance Commission period (2021-26). POSHAN 2.0 is based on convergence, governance, capacity-building, community outreach (*Jan Andholan*), innovations, ICT interventions, media advocacy, and research on nutritional support (NITI Aayog, 2024). Under *Saksham Anganwadi 2.0,* a total of 40,000 Anganwadis per year across the country are being upgraded for improved nutrition delivery and early childhood care and education for the development of children under six years of

age. The MoWCD has also launched *Poshan Bhi*, *Padhai Bhi* for the holistic development of children under six years, which integrates education and cognitive development with health and nutrition.

POSHAN 2.0 focuses on maternal nutrition, infant and young child feeding norms, treatment protocols for Moderately Acute Malnutrition / Severely Acute Malnutrition (MAM/SAM), and wellness through AYUSH, to reduce stunting, wasting, under-weight prevalence, and anaemia. Data management and monitoring through Poshan Tracker (a robust centralized data system linked with RCH Portal (ANMOL)[5] of the MoHFW is another major initiative to ensure transparency, efficiency, and accountability in the delivery of supplementary nutrition.

Meanwhile, in 2024, a study conducted in Odisha found that a significant number of AWCs in the state – close to 80% – lack toilets, and around 70% do not have access to drinking water (Times News Network, April 4, 2023). In 2025, the Maharashtra Women and Child Development Department reported that around 26,232 Anganwadis in the state were operating without toilet facilities (Siddiqui, 2025).

While Swachh Bharat Mission-Gramin (SBM-G) is dedicated to the construction of toilets for rural households and public toilets in community sanitary complexes, it does not directly address the construction of toilets in schools and Anganwadis (Ministry of Jal Shakti, 2022). Meanwhile, Anganwadi workers, as part of the ICDS program, play a vital role in promoting hygiene and sanitation practices within the community, including at Anganwadis. In addition, MoWCD is also involved in SBM (G).

In 2023, MoWCD announced that almost 75% of the new AWCs in the country will be constructed in convergence with the National Rural Employment Guarantee Scheme (NREGS) (The Hindu, April 1, 2023). According to the MGNREGS Operational Guidelines, specifically Schedule II, Section 27 and 28, the following provisions are required in the worksites. They are (1) safe drinking water (2) shade for rest (3) first aid box (4) creche facilities. As per the MGNREGS operational guidelines, *"Worksite facilities are to be ensured by the Implementing Agency. Medical aid, drinking water, shade, and crèche if there are more than five children below the age of six years will have to be provided (NREGA, Schedule II, Sections 27 and 28, emphasis added by the authors).*

While the guidelines do not specify that Anganwadis to be directly involved in arranging the creche facilities for the young children of the MGNREGS workers, there is a scope for convergence between Anganwadis and MGNREGS in providing such facilities. Moreover, among the work facilities in the MGNREGS worksite, the details on the creche are not available in the MIS constructed by the Ministry.

Part II: Comparative Perspectives on ICDS and Global Early Childhood Nutrition Schemes

This section discusses ICDS-Anganwadis within a global comparative framework by analysing similar initiatives in South Africa, Rwanda, and Bangladesh.

a) Integrated Nutrition Program (INP) in South Africa

The Integrated Nutrition Program (INP) in South Africa was introduced in the mid-1990s (introduced in 1994 and launched in 1995). Children under six years of age, pregnant and lactating woman and those from HIV/TB affected households are the target group covered under the INP. Nutrition education, growth monitoring, micronutrient supplementation (Vitamin A, Iron, Iodine), breastfeeding support, and disease-specific nutrition interventions (HIV/TB patients) are the services offered under INP (Bourne et al., 2007 and Brits et al., 2017).

INP is implemented mainly through primary health care clinics, schools and community centres. It is nutrition-centric and health-system integrated, while ICDS-Anganwadis in India are holistic (nutrition, health checkups, preschool, health and nutrition education) and community-embedded. The INP is narrower in its scope, while Anganwadis struggle with quality, infrastructure, and implementation.

ICDS is the world's largest ECCE and nutrition program. In terms of community involvement, the INP is delivered through clinics/schools, while ICDS sets up dedicated AWCs in every village, supported by locally recruited women Anganwadi workers (aiming to create a sense of community ownership). India can strengthen micronutrient supplementation and clinic-based linkages from the INP experiences, and South Africa can broaden the scope of INP by incorporating the aspects of holistic child development and preschool education in the ICDS- Anganwadi framework. The INP and ICDS-Anganwadis need stronger monitoring and evaluation mechanisms, capacity building of frontline workers and stakeholders, and better inter-sectoral convergence.

b) Nutrition Interventions and Cash Transfers in Rwanda

Rwanda offers a combination of nutrition programs along with cash transfers to address malnutrition crisis. Rwanda has reduced stunting from 51% in 2005 to 33% in 2020, one of the steepest declines in the sub-Saharan Africa Region (World Bank, 2020).

1. Gikuriro Program

The *Gikuriro* (Well-Growing Child) program is a comprehensive nutrition and early childhood development initiative in Rwanda. It aims to improve the nutritional status of children under five

years of age and women of reproductive age. The emphasis is on integrated interventions combined with nutrition-specific and nutrition-sensitive approaches (Chathukulam, 2025). *Gikuriro* offers

1. Nutrition education and counselling by community health workers and nutritionists;
2. WASH (water, sanitation, and hygiene) interventions, including improved access to WASH services to prevent malnutrition-related diseases;
3. Agricultural support and small livestock/assets, including promotion of agricultural productivity to enhance food security;
4. Savings and lending groups (financial literacy and economic resilience programs to empower households);
5. Behaviour change training for mothers and caregivers; and
6. Growth monitoring and promotion activities to track and support child development.

The *Gikuriro* program in itself does not distribute cash; it provides services, training, and material support.

2. Home-Based Early Childhood Development (HB- ECD)

The HB-ECD trains women caregivers to deliver ECD and nutrition services directly in homes and communities. It has been found that HB-ECD has a positive impact on parenting styles, dietary practices, and early learning environments (Jensen et.al, 2021).

3. Nutrition Sensitive Direct Support (NSDS)

The NSDS is a conditional cash transfer program targeting poor households with pregnant women or children up to 2 years of age. Only beneficiaries who attend and access health and nutrition services on a regular basis are eligible for this incentive. The NSDS have reportedly led to improvements in birth registration systems, and benefitted over 200,000 households (World Bank, 2020). According to a World Bank study, these interventions have bolstered consumption stability and early-life human capital development (World Bank, 2020).

4. Give Directly - Unconditional Cash Transfers (UTCs)

Give Directly is an NGO that delivers unconditional cash transfers (UCTs) directly to poor households via mobile money. In Rwanda, Give Directly partners with the World Bank and Innovation for Poverty Action (IPA). It has been found that unconditional transfers ($1,000) to vulnerable households improve child nutrition levels, reduce mortality, and promote household investment in nutrition, education and agriculture (World Bank, 2020). This shows that cash might help with immediate access to food, while integrated programs are needed for long-term nutrition outcomes.

5. Gardens for Health International (GHI)

Founded in 2007, Gardens for Health International (GHI) is an NGO based in Rwanda that partners with the Ministry of Health, health centres, and community health workers to tackle

malnutrition through meal diversity and hygiene. Home gardening, nutrition education, and cooking demonstrations are offered under this initiative. The core focus is in addressing childhood malnutrition through nutrition education and health system integration.

India can explore the feasibility of cash-linked nutrition incentives like Nutrition Sensitive Direct Support (NSDS) and Unconditional Cash Transfers (UCTs) alongside ICDS-Anganwadi services to boost food security at household levels. AWCs provide hot cooked meals and Take-Home Rations (THR). Since 2017, some states in India have experimented with Direct Benefit Transfer (DBT) in the place of THR. Here, the cash equivalent of supplementary nutrition is transferred directly into the Aadhaar-linked bank account of the concerned beneficiary. Currently, DBT coverage remains limited and uneven across states.

Rwanda can incorporate community-based ECCE platforms similar to Anganwadis to deliver more holistic and early childhood care. Strong monitoring, inter-sectoral convergence, and sustainable financing are required in this regard.

c) Early Childhood Development (ECD) and Nutrition Interventions in Bangladesh

Income Support Program for the Poorest (ISPP) also known as *Jawtno*, is a conditional cash transfer for pregnant women and mothers of children under five years of age. The incentive / cash disbursement is on the basis of the level of participation of the beneficiaries in health, nutrition, and ECD activities. It has been reported that *Jawtno* has led to better food security, maternal diet diversity, and use of antenatal and child health services (Ahmed et al., 2012).

Bangladesh also offers integrated ECD through community clinics, which provide parenting sessions and play-based simulation for parents. It has led to improved parental knowledge and hands-on approach in early stimulation practices. Bangladesh emphasizes a combination of cash and parental capacity-building, while ICDS-Anganwadis in India focuses on in-kind nutrition and preschool. Bangladesh and India offer complementary models, in which cash/incentive to support food security in households along with holistic ECCE as in the case of Anganwadis can bring better outcomes.

ICDS (Anganwadi) is structurally comprehensive and holistic in terms of integration with health, nutrition, and education. However, the implementation gap diminishes its effectiveness. Global programs similar to ICDS offer feasible interventions, as in the case of Rwanda and Bangladesh's evidence-based cash transfer systems, which India can experiment with in the case of Anganwadis. In short, the future success of ICDS-Anganwadi framework will lie in seamlessly blending its comprehensive framework with innovative delivery, monitoring, education, and flexibility mechanisms, as seen in global nutrition programs.

Part III - Role of Anganwadis in Addressing Cultural Poverty in India

Cultural poverty refers to deprivation in terms of values, practices, habits, knowledge and social environment that prevent people from achieving their social and moral development. Poverty is not only an economic problem but also a social problem (Haq, 2019). Pellissery and Mathew (2012) argue that poverty is not only an economic condition but also a cultural and emotional experience.

Cultural poverty is deeply tied to lack of awareness about health, nutrition and education, customs, and traditions that restrict participation in formal schooling and the workforce, intergenerational transmission of illiteracy and poor health practices, and limited exposure to cultural and intellectual capital. Thus, cultural poverty perpetuates cycles of illiteracy, malnutrition and gender inequality.

In India, Anganwadis play a greater role in breaking the transmission of cultural poverty by inculcating values and knowledge through structured learning environments. Anganwadis help children and their mothers adopt hygiene practices and make them aware of the importance of consuming nutritious food and a healthy lifestyle from a young age. Expectant and lactating mothers are educated on early states of childcare and childhood development, basic hygiene and sanitation, and breastfeeding and nutrition.

Lack of opportunities for personal development and limited choice also leads to cultural poverty. Anganwadis address this issue by providing essential services that enhance social capital. For instance, Anganwadis provide informal, play-based preschool education that has the potential to stimulate a child's cognitive, emotional, and social development. It has been argued that early childhood education between 3 to 6 years provides a sound basis for learning in later stages of life (Chakrabarty, 2024). The early years are critical, as children acquire language and basic numerical, motor, and social skills during this period. The Anganwadis ensure that children get adequate support in learning during this crucial period.

Anganwadis provide health and nutrition education for women aged 15-45, including adolescent girls. According to National Family Health Survey (NFHS)-5 (2019–21), 23.3% of women aged 20–24 were married before age 18, and nearly 7.9% of women aged 15–19 had begun childbearing. While delaying childbirth until the mid-20s is recommended for better health, early marriage and childbearing remain common in parts of India, so education must be sensitive to these realities. Awareness on hygiene and sanitation and healthy breastfeeding practices are given to teenage girls and expectant and lactating mothers. This in a way helps young girls to embrace motherhood in a safe manner and equips them with skills and enhances their capabilities to care for children and make the future generations healthier, thereby breaking a key aspect in the transmission of cultural poverty.

Anganwadis also act as social spaces where local women and Anganwadi workers form social connections and share vital information related to health, hygiene, and nutrition. Since Anganwadis employ women as workers and helpers, it also provides them with a source of income and recognition in their social circles. Thus, Anganwadis serve as a social hub for women empowerment and

community empowerment. Moreover, Anganwadis operate as an inclusive cultural space where vulnerable and marginalized communities access state support and social learning and thereby bridge the cultural gaps.

A 2013 study argues that Anganwadis serve as an instrument for social empowerment, as they act as a support to rural women in their daily lives, allowing them to take part in various activities outside of the house and go out to work, thus bringing in their own contribution to the household finances (Dwivedi and Naga, 2013). Anganwadi centres play a central role in reducing the fatigue, stress, and health problems of the mothers by taking over some of the major responsibilities in nurturing infants and young children; this gives some time and space to the mothers to attend to other daily activities and family duties (Dwivedi and Naga, 2013). Thus, Anganwadis play a significant role in addressing social and cultural deprivation.

Part IV: Anganwadis in India through the Doughnut Economics Framework

Doughnut Economics is a sustainable economic development framework that aims to balance human well-being with ecological ceilings. Proposed by Kate Raworth in her book titled *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist*, this model envisions a safe and just space for humanity (Raworth, 2017).

The Doughnut Economics model is characterized by:

- An 'Inner Ring' (Social Foundation) which includes, food, health, sanitation, education and gender equality. The social foundation sets a baseline to ensure everyone's basic needs are met for a dignified life. The idea is that 'no one should fall below this social foundation' (Raworth, 2017).
- An 'Outer Ring' (Ecological Ceiling), which deals with planetary boundaries (climate change, global warming) that humanity must not exceed to avoid irreversible damage to the planet's biodiversity
- The Circular Form (in the 'Doughnut') refers to the 'safe and just space for humanity' and denotes the need to find balance between social justice and environmental sustainability.
- Anything that falls outside of the Doughnut is either a shortfall in the social foundation or in excess of the ecological ceiling, that can have devastating consequences for humanity, manifesting in irreversible poverty or environmental degradation.

ICDS-Anganwadis in India contribute a lot in terms of strengthening the Inner Ring (Social Foundation) aspect when looked at through the lens of Doughnut Economics. Anganwadis provide supplementary nutrition, facilitates immunization and referrals, offer pre-school education (informal early childhood education), and serve as community-level institutions for maternal and childcare support. The beneficiaries are adolescent girls, pregnant and lactating women and children from

vulnerable households. Thus, Anganwadis strengthen the social foundation by providing nutritious food, access to health services, and affordable education, and also address gender equity. The Anganwadis also provide work and income (despite concerns that they get meagre wages) to women from marginalized sections of the society.

Households are basic units of social and economic well-being. Households in poverty lack access to nutritious food, affordable healthcare, and education, and face various socio-economic inequalities, including gender inequalities and discrimination. By fostering awareness about health, sanitation and sustainable practices, Anganwadis act as a catalyst in breaking the intergenerational poverty cycles. With access to basic services (child nutrition, preschool and maternal health services) through Anganwadis, households reach a stage where they are less likely to fall to extreme deprivation. Empowered households can also make sustainable choices that respect the ecological ceiling, and the same applies to sanitation, hygiene, and the adoption of a healthy lifestyle.

Raworth quotes futurist Alvin Toffler, '*How productive would your workforce be if it hadn't been toilet trained?'* (Toffler, 1998). It shows how basic services like sanitation and hygiene are prerequisites for productivity. While mainstream economics may quickly dismiss this as non-productive, the care and socialization in Anganwadis and households play a greater role in ensuring social and economic development of young children and their families.

In terms of the Outer Ring, the environmental sustainability of Anganwadis is an area that needs to be seriously investigated. In principle, Anganwadis are expected to source fresh, locally produced vegetables. The MoWCD also insist food for Anganwadi children should be locally sourced as far as possible, including seasonal vegetables, cereals, and pulses. POSHAN Abhiyaan also gives emphasize to community participation, kitchen gardens and local sourcing. Nutri-Gardens / Poshan Vatikas in Anganwadis have been part of the national policy framework since 2018, and many Anganwadis across India have set these up. However, there is lack of relevant empirical data regarding the number of Anganwadis that sustain Nutri- Gardens, and whether they source fresh and locally produced vegetables from these gardens or from local markets.

Similarly, the Take Home Rations (THR) program provides fortified rations for home use for children aged between 6 and 36 months, and for pregnant and lactating women, who are registered at the AWCs. While hot cooked meals are given to children 3-6 years at the AWC itself, the THR is provided to be consumed at home. The THR typically includes blended foods like wheat, rice, soya, sugar, and oil fortified with micronutrients, ready-to-eat mixes (e.g. rice-lentil porridge mix, roasted gram flour mix, semolina mix), raw ingredients (cereals, pulses, oil, and eggs) and fortified energy-dense packets for severely malnourished children in certain regions. The contents in THR vary from state to state.

States are encouraged to involve women's self-help groups (SHGs), cooperatives, and local food producers in THR preparation and supply. However, there have also been concerns regarding the quality of foods provided through Anganwadis from time to time, and interventions to address it to some extent. Through all of these interventions, Anganwadis have the potential to function as engines

of Doughnut Economics and 'secure a safe and just space for all' – right from young children to vulnerable members in households.

Part V - The Impact Made by ICDS in Addressing Nutritional Crisis in India: A Mixed Perspective

Part V of the paper has two sections. The first section looks into the positive and negative impacts of the ICDS in addressing the nutrition deficit. The second subsection looks into the NEP 2020 and its impact on ECCE in Anganwadis.

There is no doubt that ICDS-Anganwadis have played an instrumental role in addressing the nutritional crisis in India. The National Family Health Surveys (NFHS-1 to NFHS-5) shows that ICDS did have a considerable impact. The data from NFHS-1 (1992-93) to NFHS-5 (2019-21) show that the prevalence of stunting in India has decreased from 51.9% to 34.1%, and the prevalence of underweight has reduced from 45.8% to 29.4% (Chaudhuri et al., 2023). Meanwhile, there is a modest increase in the prevalence of wasting (from 19.9% to 20.5%).

While all states in India followed a comparable pattern of decline in stunting and undernutrition, there was no comparable pattern in the prevalence of wasting (Chaudhuri et al., 2023). The NFHS-5 (2019-21) shows a significant positive trend in maternal and child health services, with close to 70% of women receiving pre-natal check-ups in the first trimester, and around 60% having at least four ante-natal check-ups. Institutional delivery has reached close to 90%[6], and immunization among children increased to 77% (NITI Aayog, 2024).

A 1992 study by Tandon and Gandhi to assess the influence of ICDS on the immunization rates of children aged 12-24 months and mothers of the infants found that the immunization rates for BCG, diphtheria-pertussis-tetanus (DPT), and poliomyelitis vaccines were found to be 65%, 63%, and 64% respectively among the ICDS beneficiaries. The non-ICDS group exhibited significantly lower coverage, at 22% for BCG, 28% for DPT, and 27% for poliomyelitis. Close to 68% of mothers within the ICDS group completed immunization with tetanus toxoid, while only 40% of mothers in the non-ICDS group (Tandon and Gandhi, 1992).

A 2021 all-India study covering 512 Anganwadis and 15300 children found that the malnutrition rates among the sample have drastically reduced (Panda, 2021). Meanwhile, also it also brought out concerns that the ICDS data cannot adequately provide a full view of the nutritional status of all young children in India (Panda, 2021). For instance, children coming from well-off and influential families are not sent to Anganwadis (with rare exceptions), and a significant number of marginalized communities living in remote areas and inaccessible habitations are beyond the reach of ICDS. While ICDS-MIS does generate a database on the nutritional indicators for children under 6 years, it only contains the data of the children who are ICDS beneficiaries. Thus, ICDS data alone cannot give a true picture of the extent of malnutrition in India.

Nevertheless, it has been found that the ICDS-Anganwadis are instrumental in addressing the multifaceted challenges faced by vulnerable sections of the society (Shanthi, 2024). Pandey et al (2013) found that a few southern states and UTs, such as Kerala, Tamil Nadu, Daman, and Diu, have performed relatively better in enrolling children in ICDS, and in availing supplementary nutrition to pregnant women and lactating mothers.

A 2020 study by Dhamija and Sen found that children who were part of the ICDS-Anganwadis in their first three years of life had comparatively better health outcomes as they grew older, when compared with children who were not exposed to ICDS. For instance, a cohort of 10-13-year-old children who were fully exposed to the ICDS-Anganwadi program during the first three years of their life exhibit greater height (by 2.3 cm) and weight (by 1 kg) when compared to the same cohort who did not receive these services in the initial three years (Dhamija and Sen, 2020).

A 2024 study to assess the impact of ICDS in addressing malnutrition in Kanyakumari district, Tamil Nadu, found that anganwadis have a significant impact on the nutritional and health status of children (NHC) in the district (Shanthi, 2024). The study found that the prevalence of child malnutrition has decreased in Kanyakumari district, indicating that the ICDS has been effective in improving NHC (Shanthi, 2024). ICDS-Anganwadis are integral to India's efforts to achieve SDG 2 (No Hunger), SDG3 (Good Health and Well Being), SDG 4 (Quality Education), and SDG 12 (Responsible Consumption and Production).

While it's true that ICDS-Anganwadis have played a role in bringing down malnutrition and other nutritional deficiencies, there are considerable criticisms too (Chudasama et al., 2015, Gireesan and Sreeja, 2019, Ghosh et al., 2025). For instance, the World Bank in its 1998 report titled 'India Wasting Away: The Crisis of Malnutrition in India' notes that: "*India has taken the problem of malnutrition seriously since Independence – more so than many other countries – and has developed appropriate policies and mounted major programs to address it. These include the Public Distribution System (PDS), the ICDS program, the National Mid-Day Meals Program (NMMP), and several employment schemes providing food for work. Overall, however, these policies and programs have had relatively limited impact on nutrition among the poor, because of major problems in effective targeting, implementation, and coverage"* (World Bank, 1998, p.2).

Kerala has been a frontrunner in NITI Aayog's National Health Index and has robust healthcare institutions even at the grassroots level. Kerala's HDI stands at 0.79, with a highly literate population and higher life expectancy (Sreedevi, 2017). Kerala is one among the few states in India to bring its Infant Mortality Rate down to 6 (per 1,000 live births). In 2021, the Government of Kerala introduced the Smart Anganwadi Project, sanctioning Rs.9 crores for 48 Smart Anganwadis. Yet, the Kerala model of development has not reached Attapadi, a tribal belt in Palakkad district in Kerala. Attapadi has been dealing with high infant mortality rates, severe malnutrition, premature births, and low birth weight (Sreedevi, 2017).

Programmes like ICDS and the PDS have been found inadequate to address the malnutrition problem in Attapadi and similar such pockets in Kerala. Karnataka also has such examples to show

that the benefits of ICDS are not equally distributed in spatial terms as per the need (Rajan et al.,2015). NITI Aayog and the Institute of Economic Growth (2024) assessed ICDS implementation across states and identified inter-state disparities, infrastructure deficits in Anganwadi centres, and gaps in capacity building. Madhanagopal (2023) found that lack of awareness, caste differences, resource scarcity, and systemic weaknesses dampen community participation and scheme utilization. A 2025 study by Rahaman et al. emphasizes that despite ICDS's broad reach, many children miss out due to socio-economic and systemic barriers, recommending improvements in both demand- and supply-side factors (Rahaman et al.,2025). Dixit et al. (2018) estimate the impact of ICDS on the institutional delivery and on the nutritional status of children in rural India, found that among the rural women who received nutrition and health education specifically from the ICDS, there was a 12.3% higher institutional delivery as compared with those not exposed to such education. However, no positive impact on children's nutritional status was found (Dixit et al., 2018).

A 2024 study by Behera et al. conducted among 286 children in the age cohort of 3 to 6 years, registered with AWCs in in ten villages in two rural districts of Odisha (high proportion of SC/ST populations) found that protein intake is broadly adequate when combining home and supplementary nutrition, while calorie intake is significantly deficient across the selected age groups. The study indicates that the supplementary nutrition has partial success in ICDS, and it helps with some protein needs, while substantial gaps remain in calories and micronutrients (Behera et al., 2024). Therefore, ensuring equity means special attention for SC/ST groups, especially in rural, tribal, and slum areas (Meena et al., 2017 and Behera et al., 2024).

While the majority of the All-India Surveys conducted by Indian agencies portray a positive picture, or in some cases a mixed perspective, international reports and studies show a contrary picture. Take the case of the Global Hunger Index (GHI), in which India is one of the poorest performers in the world. The GHI score is based on four broad parameters: child stunting (share of children under five with lower height proportional to their age, reflecting chronic undernutrition), undernourishment (share of population with insufficient caloric intake), child wasting (share of children under five with lower weight proportional to their height) and child mortality (share of children who die before their fifth birthday). In the 2024 GHI, India ranks 105 among 127 countries.

This dismal performance indicates serious levels of hunger: The 2024 GHI report states that 35.5% of children in India are stunted, 18.7% wasted, and 2.9% die before their fifth birthday. This is even as the NFHSs indicate that India has made significant improvements in all health and nutrition indicators. The Indian government and policymakers have blamed GHI's flawed methodology for India's poor rankings (Rajalakshmi, 2023).

The NFHS has been conducted in India since 1992-93 and provides state- and national-level data on fertility, infant mortality, maternal mortality, child mortality, nutrition status of the population, particularly women (anaemia) and children (stunting, wasting, underweight), reproductive health, family planning practices, and so on. While GHI is released annually, the NFHS is released every three years. Another reason for India's dismal performance is due to the reformulation of GHI to capture

multifaceted aspects of malnutrition, wherein underweight (an indicator that India was doing well) was replaced by stunting and wasting. Thus, the persistent rates of child stunting in India have resulted in poor rankings.

The NEP 2020 and Anganwadis through the Lens of ECCE

The NEP 2020 places significant emphasis on ECCE, including the role of Anganwadis. The NEP 2020 envisions Anganwadis as integral components of the education system, providing high-quality preschool education for children aged 3-6. It advocates for integrating Anganwadis into school complexes and thereby creating a seamless transition from early childhood education to primary school, ensuring continuity in learning.

Anganwadi workers will be trained to deliver high-quality ECCE. *The Poshan Bhi, Padhai Bhi* ('Both Nutrition and Education') program, launched in alignment with the NEP 2020, also provides two hours of high-quality pre-school instruction at AWCs. The NEP introduces a structured curriculum for Anganwadis, with emphasis on a play-based and activity-oriented learning environment (Porecha, 2024). The curriculum for Anganwadis is designed to address the developmental milestones of 0-3 and 3-6-year-olds, including children with disabilities.

85% of a child's total brain development (physical, motor, cognitive, and cultural development of children) takes place before the age of 6, highlighting the essential role of suitable care and brain stimulation during a child's formative years for promoting long-term healthy brain development and growth. Thus, the NEP's structured activity-based curriculum is vital in this regard.

Part VI – Challenges Faced by the ICDS

This section looks into the major challenges faced by Anganwadis.

1) Corruption in Anganwadis

Corruption in AWCs is a critical issue, undermining India's effort to combat malnutrition and deliver quality early childhood care. Reports highlight irregularities in hiring, poor food quality, manipulation of attendance rolls, mismanagement of funds, and disrupted service delivery (Yelvattimath and Nithyashree, 2015; Deena and Sivanesan, 2019; Reddy et al., 2022; Gandhi and Swamy, 2024). Manipulation of enrolment and attendance records to secure extra nutritional supplies is widespread, with many enrolled children existing only on paper.

In Kasaragod, Kerala, Anganwadis faced corruption related to food and resource distribution, with audit teams confirming discrepancies between items purchased and those actually distributed (Sankar, 2014; Gireesan and Sreeja, 2019). More recently, in Karnataka, allegations surfaced against the Woman and Child Development Minister for awarding tenders to blacklisted suppliers, compromising food quality (Raj, 2023). In 2025, Odisha and Uttarakhand saw arrests of officials and

workers for bribery (Sethy, 2025; Ahuja, 2025). In Tripura, an Anganwadi centre remained closed for months due to corruption complaints, highlighting administrative neglect and community unrest (Dey, 2025). Addressing corruption requires strengthened accountability, enhanced transparency, and community empowerment to ensure effective delivery of Anganwadi services.

2) Urban-Rural Divide

While ICDS is envisioned as universal in nature, an urban-rural divide exists, with only 1.36 lakh AWCs in urban areas, as against a total of 14 lakh AWCs sanctioned across India. It has been reported that for every 100 Anganwadi beneficiaries in India, only seven are in urban areas (Singh, 2023). As per the National Urban Health Mission Framework Report, over 46% of poor children in urban areas are underweight, and around 60% miss comprehensive immunization even before they turn one year old, and this is a major challenge in combating urban malnutrition (Lone. et. al, 2021, Singh, 2023, Government of India, 2023).

AWCs located in slums and urban regions face several challenges, including spatial, infrastructural, and societal challenges. Insufficient space, poor water and sanitation facilities, lack of collaboration between health and allied departments with urban local governments, absence of affordable rental provisions necessary for the operation of AWCs, lack of a robust primary healthcare system in urban settings, and poor awareness and community involvement are the major issues in urban regions of India (Kumar and Banerjee, 2017). Strengthening the urban nutrition framework is crucial for India's overall development and growth, including SDGs.

3) Anganwadis Not a Pressing Issue in Local Political and Development Landscape

Community-based monitoring at the grassroots level is essential for the effective functioning of AWCs, with Panchayati Raj Institutions (PRIs) playing a key role. PRIs oversee regularity, beneficiary coverage, infrastructure, food distribution, health services, and coordinate with departments like health, education, and women and child development. The Government of India emphasizes PRI involvement in planning and executing ECCE programs.

Community groups like Anganwadi Level Monitoring and Support Committees (ALMSCs) and Mothers' Collectives are vital in ensuring service delivery (Government of India, 2012, Attri, 2014). ALMSCs – comprising elected panchayat members, health workers, mothers, and Anganwadi staff – act as a forum for deliberation and facilitate planning and budgeting. Responsibilities include upkeep, safety, nutrition, and procurement of learning materials. Funds from Gram Panchayats are channelled through ALMSCs to meet local needs. Mothers' Collectives disseminate health and welfare information. Nutri-gardens (Poshan Vatikas), maintained by Anganwadi staff with support from these groups, enhance nutrition (Londhe, 2024).

Although widespread, the effectiveness of ALMSCs and Mothers' Collectives varies and requires detailed monitoring (Ramesh, 2022). National Level Monitoring (NLM) and evaluation apparatus

needs to be introduced to capture the ground reality regarding the same. Despite policy support through Gram Panchayat Development Plan (GPDP) and Mission Antyodaya, Anganwadis remain underrepresented in local development agendas. Strengthening them is essential for achieving key SDGs related to health, nutrition, and education, yet remains a low political priority at the grassroots.

4) Anganwadi Workers Denied Dignity and Fair Working Conditions

Anganwadi workers in India are overburdened, underpaid, and denied basic dignity and fair working conditions. Their responsibilities go well beyond childcare, including nutrition support for mothers and children, immunization assistance, record-keeping, preschool activities, and data collection. The introduction of the Poshan Tracker App has worsened their workload (Raghu, 2025; Upadhyaya, 2023). They are now required to enter over 150 data points, often in areas with poor internet and inadequate devices. Daily data input is mandatory, and delays can lead to loss of incentives (Mangal, 2024, Raghu, 2025 and Upadhyaya, 2023 and Ramakrishnan, 2022).

Despite their crucial role in delivering health and education services, they are not recognized as government employees and are paid a meagre honorarium. The central government pays Rs. 4,500 for workers and Rs. 2,700 for helpers, with additional state contributions varying widely—from Rs. 8,250 in West Bengal to Rs. 13,452 in Tamil Nadu. In Kerala, workers with over 10 years of experience receive Rs. 13,000, while helpers get up to Rs. 9,500. However, delays in disbursement are common across states, including Kerala, Uttar Pradesh, and Jammu & Kashmir.

Anganwadi workers often pay electricity, rent, and water charges from their own pocket, with reimbursements taking months (Guruswamy and Kuruganti, 2018; Onmanorama, March 20, 2025). While some states provide welfare pensions—Rs. 2,500 for workers and Rs. 1,500 for helpers in Kerala—delays of up to nine months have been reported in their disbursal. Workers must also contribute monthly to the fund, despite unreliable pay-outs. The All-India Federation of Anganwadi Workers and Helpers (AIFAWH) continue to demand better pay, timely disbursement, and official recognition as government employees. Yet, their contributions remain undervalued, and their voices unheard.

5) Anganwadi Workers Not Given Adequate Training in Identifying Learning Disabilities in ECCE

Anganwadi workers have a broad mandate that includes preschool education, nutrition distribution, health check-ups, home visits, and community engagement. This overwhelming workload leaves them with only about 38 minutes daily for preschool instruction—far below the recommended two hours—limiting early cognitive development during the crucial ages of 3 to 6 (Sharma-Kukreja and Miranda, 2025).

Despite the enrolment of 5.5 crore children in 14 lakh AWCs and 56,000 government pre-primary schools, the overall quality of ECCE remains poor. While the MoWCD has introduced ECCE

training modules, there is still a lack of capacity-building among Anganwadi workers, especially in identifying learning disabilities. There have been calls for specialized training like Montessori education, which emphasizes observation and can help in early detection of learning issues. Recognizing this, in 2023, the Union Government launched a new Anganwadi protocol for early identification of developmental delays and disabilities, linking children to health and social justice interventions (Pandit, 2023). However, there is a lack of empirical evidence to assess its effectiveness.

Kerala has emerged as a model in this regard. In 2025, it launched the *Kunjooz Card* to track children's sensory and cognitive development through a color-coded system, helping Anganwadi workers identify and refer children with delays in cognitive development milestones (Chathoth, 2025). The state also has an extensive network of BUDS (Basic Universal Disability Support) institutions, comprising 330 centres offering education and vocational training for children and adults with intellectual disabilities. These centres, run by local governments and *Kudumbashree*[7], employ over 1,100 staff, including special educators and caregivers. Collaboration between BUDS and Anganwadi centres can enhance early disability screening and support services.

With the NEP, 2020 emphasizing foundational learning and ECCE, it is vital to reshape Anganwadis beyond their traditional role, empowering them as key educational institutions. This transformation is crucial not only for achieving SDGs but also for realizing the vision of *Viksit Bharat 2047* – a future where every child receives quality early education and developmental support, regardless of background.

Part VII – Conclusion, Recommendations, Suggestions, and Way Forward

India has long prioritized food and nutrition security through various schemes like ICDS, Mid-Day Meals, Poshan Abhiyan, and Saksham Anganwadi. The ICDS, a flagship programme for early childhood care and nutrition, has played a significant role in addressing malnutrition among children, pregnant and lactating women, and adolescent girls. ICDS has been in operation for close to fifty years. However, nutritional challenges persist and addressing them is crucial for India's progress in the SDGs, GHI, and MPI rankings.

To meet evolving needs, Anganwadis must modernize both in infrastructure and function—by integrating ICT tools, creating smart learning spaces, and strengthening monitoring systems. However, monitoring agencies often fail to ensure proper implementation, leading to inefficiencies and the risk of data manipulation. A renewed National Level Monitoring (NLM) mechanism is needed for ICDS. Research, especially longitudinal studies/randomized control trials, should be prioritized to assess the long-term impact of ICDS. Integration of AI and real-time databases will help streamline service delivery and accountability. The NEP 2020 rightly repositions Anganwadis as early childhood education centres, helping to remove their stigma as institutions only for the poor.

Future reforms must focus on infrastructure, service delivery, professionalisation of workforce, community engagement, and better governance. Anganwadis should evolve into "Nutrition-Cum-Learning Centres," integrated with schemes like Ayushman Bharat, NHM, and ASHA networks for holistic care. Health coverage under the Ayushmaan Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) must be extended to Anganwadi-registered children. Capacity-building of workers through regular training in ECCE, nutrition, and digital tools is vital. Substantial budgetary support is essential.

The 2025–26 Union Budget's allocation of ₹21,960 crores for Saksham Anganwadi and POSHAN 2.0 marks only a minor increase over the previous year, in *real terms* adjusted for inflation. For India's vision of *Viksit Bharat@2047*, policymakers must prioritize child-centric budgeting to build a healthier and equitable future.

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Notes

[1] Cultural poverty refers to the idea that poverty is not just an economic issue but also a cultural one. Lewis (1959) popularized this concept through his studies of poor families in Mexico, Puerto Rico and India. According to him, people living in poverty develop a distinct culture with its own sets of values, beliefs and behaviours that perpetuate their impoverished condition.

[2] Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, Telangana, Gujarat, Bihar, West Bengal, Maharashtra, New Delhi, North-Eastern and Himalayan States, and Lakshadweep Islands.

[3] The cost-sharing ratio for implementation of the scheme for States / UTs with legislatures is 60:40, while for North-Eastern and Himalayan States it has been fixed at 90:10.

[4] Frontline health workers are the backbone of public health delivery in India, especially in rural and underserved areas. These are the people who directly engage with the community to provide essential health services, create awareness, monitor health status, and link people with government health programs. The frontline workers are mainly (1) Accredited Social Health Activist (ASHA), (2) Auxiliary Nurse Midwife (ANM) and (3) Anganwadi Worker (AWW).

[5] RCH Portal (Reproductive & Child Health Portal) is a digital platform designed for name-based tracking of beneficiaries in RCH programmes and ANMOL (Auxiliary Nurse Midwife Online) is an app / tablet/mobile-based version of the RCH Portal for field level workers (especially ANMs) to capture data at source.

[6] ICDS -Anganwadi play a **crucial role** in promoting **institutional deliveries and the** role focuses more on **awareness, facilitation, and support**, rather than directly conducting deliveries.

[7] Kudumbashree is a poverty eradication and women's empowerment programme launched in 1998 by the Govt. of Kerala. Today Kudumbashree is one of the largest women self-help groups (SHGs) in India with over 4.8 million members (Chathukulam and Joseph,2022)